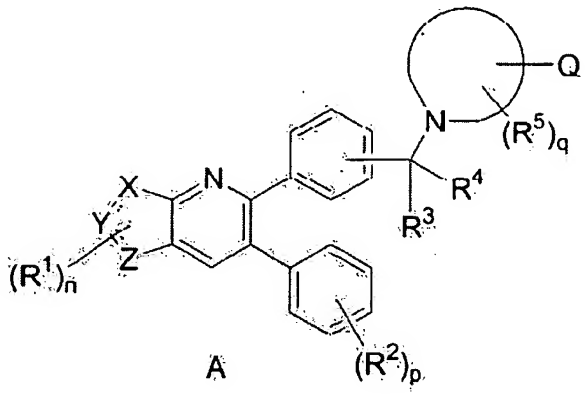
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Original) A compound of the Formula A:



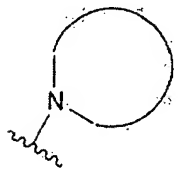
A

wherein:

a is 0 or 1; b is 0 or 1; m is 0, 1 or 2; n is 0, 1, 2 or 3; p is 0, 1 or 2; q is 0, 1, 2 or 3; r is 0 or 1; s is 0 or 1; t is 2, 3, 4, 5 or 6;

X, Y and Z are independently selected from: C, N, S or O provided that at least one of X, Y or Z is N, S or O;

dashed line represents an optional double bond;



is heterocyclyl;

Q is selected from: $-NR^6R^7$, aryl and heterocyclyl, said aryl and heterocyclyl is optionally substituted with one to three R^z;

R^1 is independently selected from: 1) $(C=O)_aO_bC_1$-C_{10} alkyl, 2) $(C=O)_aO_b$aryl, 3) C_2-C_{10} alkenyl, 4) C_2-C_{10} alkynyl, 5) $(C=O)_aO_b$ heterocyclyl, 6) $(C=O)_aO_bC_3$-C_8 cycloalkyl, 7) CO_2H, 8) halo, 9) CN, 10) OH, 11) O_bC_1-C_6 perfluoroalkyl, 12) $O_a(C=O)_bNR^6R^7$, 13) $NR^c(C=O)NR^6R^7$, 14) $S(O)_mR^a$, 15) $S(O)_2NR^6R^7$, 16) $NR^cS(O)_mR^a$, 17) oxo, 18) CHO, 19) NO_2, 20) $NR^c(C=O)O_bR^a$, 21) $O(C=O)O_bC_1$-

C_{10} alkyl, 22) $O(C=O)O_bC_3$-C_8 cycloalkyl, 23) $O(C=O)O_b$aryl, 24) $O(C=O)O_b$-heterocycle, 25) H, and 26) O_a-P=O(OH)$_2$, said alkyl, aryl, alkenyl, alkynyl, heterocyclyl, and cycloalkyl optionally substituted with one or more substituents selected from R^z;

R^2 is independently selected from: 1) $(C=O)_aO_bC_1$-C_{10} alkyl, 2) $(C=O)_aO_b$aryl, 3) C_2-C_{10} alkenyl, 4) C_2-C_{10} alkynyl, 5) $(C=O)_aO_b$ heterocyclyl, 6) $(C=O)_aO_bC_3$-C_8 cycloalkyl, 7) CO_2H, 8) halo, 9) CN, 10) OH, 11) O_bC_1-C_6 perfluoroalkyl, 12) $O_a(C=O)_bNR^6R^7$, 13) $NR^c(C=O)NR^6R^7$, 14) $S(O)_mR^a$, 15) $S(O)_2NR^6R^7$, 16) $NR^cS(O)_mR^a$, 17) CHO, 18) NO_2, 19) $NR^c(C=O)O_bR^a$, 20) $O(C=O)O_bC_1$-C_{10} alkyl, 21) $O(C=O)O_bC_3$-C_8 cycloalkyl, 22) $O(C=O)O_b$aryl, 23) $O(C=O)O_b$-heterocycle, and 24) O_a-P=O(OH)$_2$, said alkyl, aryl, alkenyl, alkynyl, heterocyclyl, and cycloalkyl optionally substituted with one, two or three substituents selected from R^z;

R^3 and R^4 are independently selected from: H, C_1-C_6-alkyl and C_1-C_6-perfluoroalkyl, or

R^3 and R^4 are combined to form -$(CH_2)_t$- wherein one of the carbon atoms is optionally replaced by a moiety selected from O, $S(O)_m$, $-N(R^b)C(O)-$, and $-N(COR^a)-$;

R^5 is independently selected from: 1) $(C=O)_aO_bC_1$-C_{10} alkyl, 2) $(C=O)_aO_b$aryl, 3) C_2-C_{10} alkenyl, 4) C_2-C_{10} alkynyl, 5) $(C=O)_aO_b$ heterocyclyl, 6) $(C=O)_aO_bC_3$-C_8 cycloalkyl, 7) CO_2H, 8) halo, 9) CN, 10) OH, 11) O_bC_1-C_6 perfluoroalkyl, 12) $O_a(C=O)_bNR^6R^7$, 13) $NR^c(C=O)NR^6R^7$, 14) $S(O)_mR^a$, 15) $S(O)_2NR^6R^7$, 16) $NR^cS(O)_mR^a$, 17) oxo, 18) CHO, 19) NO_2, 20) $O(C=O)O_bC_1$-C_{10} alkyl, 21) $O(C=O)O_bC_3$-C_8 cycloalkyl, and 22) O_a-P=O(OH)$_2$, said alkyl, aryl, alkenyl, alkynyl, heterocyclyl, and cycloalkyl optionally substituted with one or more substituents selected from R^z;

R^6 and R^7 are independently selected from: 1) H, 2) $(C=O)O_bR^a$, 3) C_1-C_{10} alkyl, 4) aryl, 5) C_2-C_{10} alkenyl, 6) C_2-C_{10} alkynyl, 7) heterocyclyl, 8) C_3-C_8 cycloalkyl, 9) SO_2R^a, 10) $(C=O)NR^b_2$, 11) OH, and 12) O_a-P=O(OH)$_2$, said alkyl, cycloalkyl, aryl, heterocylyl, alkenyl, and alkynyl is optionally substituted with one or more substituents selected from R^z, or

R^6 and R^7 can be taken together with the nitrogen to which they are attached to form a monocyclic or bicyclic heterocycle with 4-7 members in each ring and optionally containing, in addition to the nitrogen, one or more additional heteroatoms selected from N, O and S, said monocyclic or bicyclic heterocycle optionally substituted with one or more substituents selected from R^z;

R^z is selected from: 1) $(C=O)_rO_s(C_1$-$C_{10})$alkyl, 2) $O_r(C_1$-$C_3)$perfluoroalkyl, 3) $(C_0$-$C_6)$alkylene-$S(O)_mR^a$, 4) oxo, 5) OH, 6) halo, 7) CN, 8) $(C=O)_rO_s(C_2$-$C_{10})$alkenyl, 9) $(C=O)_rO_s(C_2$-$C_{10})$alkynyl,

10) $(C=O)_rO_s(C_3\text{-}C_6)$cycloalkyl, 11) $(C=O)_rO_s(C_0\text{-}C_6)$alkylene-aryl, 12) $(C=O)_rO_s(C_0\text{-}C_6)$alkylene-heterocyclyl, 13) $(C=O)_rO_s(C_0\text{-}C_6)$alkylene-$N(R^b)_2$, 14) $C(O)R^a$, 15) $(C_0\text{-}C_6)$alkylene-CO_2R^a, 16) C(O)H, 17) $(C_0\text{-}C_6)$alkylene-CO_2H, 18) $C(O)N(R^b)_2$, 19) $S(O)_mR^a$, 20) $S(O)_2N(R^b)_2$, 21) $NR^c(C=O)O_bR^a$, 22) $O(C=O)O_bC_1\text{-}C_{10}$ alkyl, 23) $O(C=O)O_bC_3\text{-}C_8$ cycloalkyl, 24) $O(C=O)O_b$aryl, 25) $O(C=O)O_b$-heterocycle, and 26) $O_a\text{-}P=O(OH)_2$; said alkyl, alkenyl, alkynyl, cycloalkyl, aryl, and heterocyclyl is optionally substituted with up to three substituents selected from R^b, OH, $(C_1\text{-}C_6)$alkoxy, halogen, CO_2H, CN, $O(C=O)C_1\text{-}C_6$ alkyl, oxo, $N(R^b)_2$ and $O_a\text{-}P=O(OH)_2$;

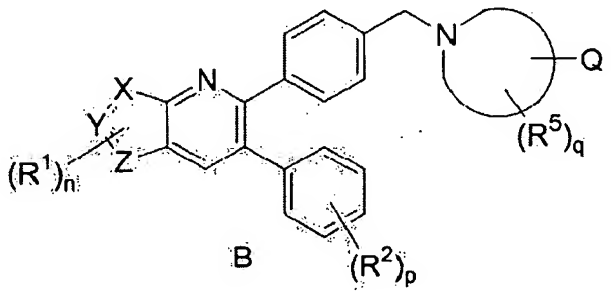
R^a is: substituted or unsubstituted $(C_1\text{-}C_6)$alkyl, substituted or unsubstituted $(C_2\text{-}C_6)$alkenyl, substituted or unsubstituted $(C_2\text{-}C_6)$alkynyl, substituted or unsubstituted $(C_3\text{-}C_6)$cycloalkyl, substituted or unsubstituted aryl, $(C_1\text{-}C_6)$perfluoroalkyl, 2,2,2-trifluoroethyl, or substituted or unsubstituted heterocyclyl; and

R^b is: H, $(C_1\text{-}C_6)$alkyl, substituted or unsubstituted aryl, substituted or unsubstituted benzyl, substituted or unsubstituted heterocyclyl, $(C_3\text{-}C_6)$cycloalkyl, $(C=O)OC_1\text{-}C_6$ alkyl, $(C=O)C_1\text{-}C_6$ alkyl or $S(O)_2R^a$;

R^c is selected from: 1) H, 2) $C_1\text{-}C_{10}$ alkyl, 3) aryl, 4) $C_2\text{-}C_{10}$ alkenyl, 5) $C_2\text{-}C_{10}$ alkynyl, 6) heterocyclyl, 7) $C_3\text{-}C_8$ cycloalkyl, and 8) $C_1\text{-}C_6$ perfluoroalkyl, said alkyl, cycloalkyl, aryl, heterocylyl, alkenyl, and alkynyl is optionally substituted with one or more substituents selected from R^z, or

or a pharmaceutically acceptable salt or a stereoisomer thereof.

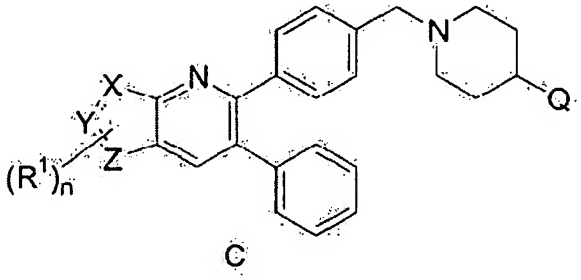
2. (Original) The compound according to Claim 1 of the Formula B:



wherein:
R^2 is independently selected from: 1) $C_1\text{-}C_6$ alkyl, 2) aryl, 3) heterocyclyl, 4) CO_2H, 5) halo, 6) CN, 7) OH, 8) $S(O)_2NR^6R^7$, and 9) $O_a\text{-}P=O(OH)_2$, said alkyl, aryl and heterocyclyl optionally substituted with one, two or three substituents selected from R^z;

or a pharmaceutically acceptable salt or a stereoisomer thereof.

3. (Original) The compound according to Claim 2 of the Formula C:



C

wherein:

Q is heterocyclyl, said heterocyclyl is optionally substituted with 1 to 3 R^z;

or a pharmaceutically acceptable salt or a stereoisomer thereof.

4. (Original) A compound which is selected from:

1-{1-[4-(3-amino-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;
1-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;
1-(1-{4-[3-amino-1-(2-morpholin-4-ylethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;
1-(1-{4-[3-amino-1-(2-hydroxyethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;
1-[1-(4-{3-amino-1-[2-(1H-imidazol-4-yl)ethyl]-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl}benzyl)piperidin-4-yl]-1,3-dihydro-2H-benzimidazol-2-one;
1-methyl-6-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-amine;
9-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-9H-purin-6-amine;
1-methyl-6-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-ol;
N-ethyl-N'-[1-methyl-6-(4-{[4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]urea;
N-[1-methyl-6-(4-{[4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]acetamide;

Methyl-3-amino-6-(4-{[4-(6-fluoro-1H-benzimidazol-2-yl)piperidin-1-yl]methyl}phenyl)-5-phenylfuro[2,3-b]pyridine-2-carboxylate;
5-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-6-phenyl-1,3-dihydro-2H-imidazo[4,5-b]pyridin-2-one;
5-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-6-phenyl-1H-[1,2,3]triazolo[4,5-b]pyridine; and
5-(4-{[4-(2-Methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-6-phenyl-1H-imidazo[4,5-b]pyridine;

or a pharmaceutically acceptable salt or a stereoisomer thereof.

5. (Original) The TFA salt of a compound according to Claim 1 which is:

1-{1-[4-(3-amino-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;
1-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;
1-(1-{4-[3-amino-1-(2-morpholin-4-ylethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;
1-(1-{4-[3-amino-1-(2-hydroxyethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;
1-[1-(4-{3-amino-1-[2-(1H-imidazol-4-yl)ethyl]-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl}benzyl)piperidin-4-yl]-1,3-dihydro-2H-benzimidazol-2-one;
1-methyl-6-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-amine;
9-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-9H-purin-6-amine;
1-methyl-6-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-ol;
N-ethyl-N'-[1-methyl-6-(4-{[4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]urea;
N-[1-methyl-6-(4-{[4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]acetamide; and
Methyl-3-amino-6-(4-{[4-(6-fluoro-1H-benzimidazol-2-yl)piperidin-1-yl]methyl}phenyl)-5-phenylfuro[2,3-b]pyridine-2-carboxylate;

or a stereoisomer thereof.

6. (Original) A compound according to Claim 4 which is selected from:

1-{1-[4-(3-amino-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;
N-ethyl-N'-[1-methyl-6-(4-{[4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]urea;
Methyl-3-amino-6-(4-{[4-(6-fluoro-1H-benzimidazol-2-yl)piperidin-1-yl]methyl}phenyl)-5-phenylfuro[2,3-b]pyridine-2-carboxylate;
5-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-6-phenyl-1,3-dihydro-2H-imidazo[4,5-b]pyridin-2-one;
5-(4-{[4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-6-phenyl-1H-[1,2,3]triazolo[4,5-b]pyridine; and
5-(4-{[4-(2-Methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl}phenyl)-6-phenyl-1H-imidazo[4,5-b]pyridine;

or a pharmaceutically acceptable salt or a stereoisomer thereof.

7. (Original) A pharmaceutical composition comprising a pharmaceutical carrier, and dispersed therein, a therapeutically effective amount of a compound of Claim 1.

8. (Original) A pharmaceutical composition comprising a pharmaceutical carrier, and dispersed therein, a therapeutically effective amount of a compound of Claim 4.

9-18. (Canceled)